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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/377,383 08/19/99 CHAI

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EXAMINER

DANG, D

ART UNIT	PAPER NUMBER
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2721

DATE MAILED: 07/05/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/377,383

Applicant(s)

CHAI

Examiner

Dang, D

Group Art Unit

2721

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-13 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-13 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3
- ☒ Notice of Reference(s) Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "demposition" in line 22 of page 15 (or claim 3, line 6) renders claim vague and indefinite because it is unclear to the examiner what applicant refers to. Claim 4-5 are rejected as being upon the rejected based claim.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Shapiro (U.S. Pat. No. 5,563,960).

Regarding claims 1 and 9, Shapiro discloses: a packet header (see item 38 of figs. 1-2 and item 54 of fig. 2); and a payload (see item 40 of figs. 1-2 and item 54 of fig. 2) having at least one texture unit only of AC coefficients from a single subband of a hierarchical subband decomposed image (see fig. 3; and col. 4, lines 1-28).

Regarding claim 2, Shapiro discloses: a packet header (see item 38 of figs. 1-2 and item 54 of fig. 2); and a payload (see item 40 of figs. 1-2 and item 54 of fig. 2) having at least one

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texture unit only of AC coefficients from all subbands of a decomposition level of a hierarchical subband decomposed image (see fig. 3; and col. 4, lines 1-28).

Regarding claim 3, Shapiro discloses: a packet header (see item 38 of figs. 1-2 and item 54 of fig. 2); and a payload (see item 40 of figs. 1-2 and item 54 of fig. 2) having a texture unit consisting only of AC coefficients across n subbands, where n represents a number smaller than a number of decomposition levels of a hierarchical subband decomposed image (see fig. 3-5; and col. 4, lines 1-28).

Regarding claim 4, Shapiro discloses where n is two (see figs. 3-5).

Regarding claim 5, Shapiro discloses where n is three (see figs. 3-5).

Regarding claim 6, Shapiro discloses: a packet header (see item 38 of figs. 1-2 and item 54 of fig. 2); and a payload (see item 40 of figs. 1-2 and item 54 of fig. 2) having a texture unit comprising bits from a plurality of DC transform coefficients that form a single bitplane (see fig. 3; and col. 4, lines 1-28).

Regarding claim 7, Shapiro discloses: generating a packet header (see items 10 & 38 of fig. 1 and item 54 of fig. 2); and generating a payload (see items 10 & 40 of figs. 1 and item 54 of fig. 2) having at least one texture unit consisting only of AC coefficients from a single subband of a hierarchical subband decomposed image (see fig. 3; and col. 4, lines 1-28).

Regarding claim 8, Shapiro discloses: generating a packet header (see items 10 & 38 of fig. 1 and item 54 of fig. 2); and generating a payload (see items 10 & 40 of figs. 1 and item 54 of fig. 2) having at least one texture unit consisting only of AC coefficients from all subbands of a

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decomposition level of the hierarchical subband decomposed image (see fig. 3; and col. 4, lines 1-28).

Regarding claim 9, Shapiro discloses: generating a packet header (see items 10 & 38 of fig. 1 and item 54 of fig. 2); and generating a payload (see items 10 & 40 of fig. 1 and item 54 of fig. 2) having a texture unit consisting only of AC coefficients across n subbands, where n represents a number smaller than a number of decomposition levels of a hierarchical subband decomposed image (see fig. 3-5; and col. 4, lines 1-28).

Regarding claim 10, Shapiro discloses where n is two (see figs. 3-5).

Regarding claim 11, Shapiro discloses where n is three (see figs. 3-5).

Regarding claim 12, Shapiro discloses: a packet header (see item 38 of figs. 1-2 and item 54 of fig. 2); and a payload (see items 10 & 40 of fig. 1 and item 54 of fig. 2) having a texture unit comprising bits from a plurality of DC transform coefficients that form a single bitplane (see fig. 3; and col. 4, lines 1-28).

Regarding claim 13, Shapiro discloses: generating a packet header (see items 10 & 38 of fig. 1 and item 54 of fig. 2); and generating a payload (see items 10 & 40 of fig. 1 and item 54 of fig. 2) for carrying coefficients, where said payload has a payload size that varies in accordance with coefficients from a subband or decomposition level of said hierarchical subband decomposed image (see fig. 3; and col. 4, lines 1-28).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shapiro (Embedded Image Coding Using Zerotrees of Wavelet Coefficients); Rogers

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et al. (Robust Wavelet Zerotree Image Compression With Fixed-length Packetization); Said et al. (A New, Fast, and Efficient Image Codec Based on Set Partitioning in Hierarchical Trees); and Chao et al. (US Patent No. 4,893,306) disclose the same field of invention.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy (Dan) M. Dang whose telephone number is (703) 305-1464. The examiner can normally be reached on Monday to Friday from 7:30AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H. Boudreau, can be reached on (703) 305-4706. The fax phone number for formal or official faxes to be received in the E-Cluster is (703) 308-9051 and for drafts and informal faxes is (703) 306-5406.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Duy M. Dang
6/29/00



JOSE L. COUSO
PRIMARY EXAMINER